

NAVAL AVIATION

NEWS

IN THIS ISSUE:

Pictorial Review of 1974



FEBRUARY 1975

NAVAL AVIATION NEWS

FIFTY-SEVENTH YEAR OF PUBLICATION

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COVERS — *A Sea King from HS-85 graces the front cover as it flies near San Francisco's Golden Gate Bridge. PHAN Lawrence J. Fina photographed USS Constellation (CVA-64) in 1971 as she was framed by the rigging of USS Wichita (AOR-1), back cover. This wingman's view of a flight leader was snapped in the mid 1930s. If you know your vintage flying machines you would have identified this one as a Curtiss BF-2C1 from VB-5. LCdr. James D. Barner is at the controls. He is now a retired rear admiral.*

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Editor's Corner

Who's got the conn? Commander K. Harry Wieschhoff, skipper of Corpus Christi's VT-31, has an idea and wrote us about it. "Some years ago I was amused to see our black shoe brothers devising a special flag display to indicate that someone other than the C.O. was at the conn as the ship entered port. The scheme was rationalized as an encouragement for commanding officers to allow junior officers to expand their ship-handling experience. I wonder if a special IFF sqawk would be appropriate to indicate that someone other than the PPC is making the GCA and landing."

Community spirit. Impromptu sign posted in the lobby of a Navy Department building on a wintry day in Washington, D. C.: "To the owner of a 1973 Mercury sedan with West Virginia license CD-521 ... I hope you have a Die Hard because your lights are on!"

Will the real aircraft commander please stand. Navigator, an Air Force magazine, tells a tale about Maj. Ed Hubbard who was shot down over North Vietnam on July 20, 1966, and was

released on March 4, 1973. Now with the 58th Tactical Fighter Training Wing at Luke AFB, Ariz., Maj. Hubbard told the following story:

When we were shot down and captured by the North Vietnamese, it happened that I was the first Air Force navigator they had ever seen. When I was confronted by my interrogator, the following dialogue took place.

Him: Ahhh, another pilot, yes?

Me: No, I'm a navigator.

Him: Navigator? I do not understand. You come down from sky in parachute, yes? You must be pilot.

Me: No, I'm the guy on the airplane who knows where we are.

Him: You no fly airplane? Where you sit?

Me: No, I don't fly. The pilot sits in front and I sit in back.

Him: But what work you do on airplane?

Me: I tell the pilot where to go. I tap his left shoulder to go left and his right shoulder to go right. I'm the guy who makes all the decisions as to what we do and where we go.

Him: Ahh, now I see. You what they call aircraft commander, yes?

Me: Now you got it, pal!

Are you kidding me? Seems that in the summer months at Great Lakes Recruit Training Command, Friday morning weather is cause for concern. According to CWO3 Larry D. Nichols weekly graduation ceremonies are conducted on that day—outside if sunny weather is forecast, inside if rain is in the offing. The C.O. makes the ultimate decision based on several meteorological intelligence sources including the National Weather Service in Milwaukee, the Naval Weather Service at Glenview, Ill., and a "weather bush" which grows inconspicuously in front of Drill Hall 1200. Only a few gifted individuals are qualified as weather bush readers. The C.O., military training officer and drill division officer hold this distinction. When asked how they do their reading, their mumbled replies hint that it has something to do with cracks in the ground surrounding the bush, which is about three or so feet high, and whitish beads of sap on the leaves. On one ceremonial day last summer, the skipper, Captain Oliver S. Hallett pondered the leaves and the surrounding turf. Despite a persuasive sunny sky in the morning, he announced that it would definitely rain during the afternoon ceremony. The review was therefore held inside and, before the final diploma had been issued, rain was pouring down outside. Legend has it that the weather bush hasn't erred in its forecasts since 1944.

No, this is not an F-8 Crusader model perched on a pedestal. It's the real thing, flown by a VFP-306 pilot while the squadron was de-

ployed to the West Coast with CVWR-30 last summer for two weeks of active duty. The squadron is home-ported at NAF Washington, D.C.



Minicopter

A one-man, rocket-powered helicopter, the first of three, has been delivered to the Navy by Aerospace General Company of Odessa, Texas. It is designed to fold into a compact package which can be paraded to downed pilots in enemy territory. The minicopter weighs less than the average man and is capable of lifting three times its own weight. With the addition of a small engine and push propeller, the next two will be capable of missions up to 250 miles.

The minicopter is powered by miniature half-pound rocket engines faired into each of the two blade tips. They convert hydrogen peroxide fuel into steam and oxygen, thus causing no air pollution and less noise than conventional helicopters. A single flight control handle, the mono-trol, reduces control of the helo to a simple one-hand operation. The level of required pilot training is expected to be not much more than what is needed to ride a motorcycle.



McClusky Award

Attack Squadron 94, NAS Lemoore, Calif., is the winner of the Admiral C. Wade McClusky Award for 1974. Recognition of the *Shrikes* as the outstanding attack squadron came during the 18th annual Tailhook Association Reunion at Las Vegas where Commander Ted W. Reynolds, squadron skipper, accepted the tribute from Vice Admiral William D. Houser, DCNO(Air Warfare). The *Shrikes* were also nominated for the Admiral Arleigh Burke Trophy and received the Battle E for being the first among the A-7E fleet units of ComLATWingPac.

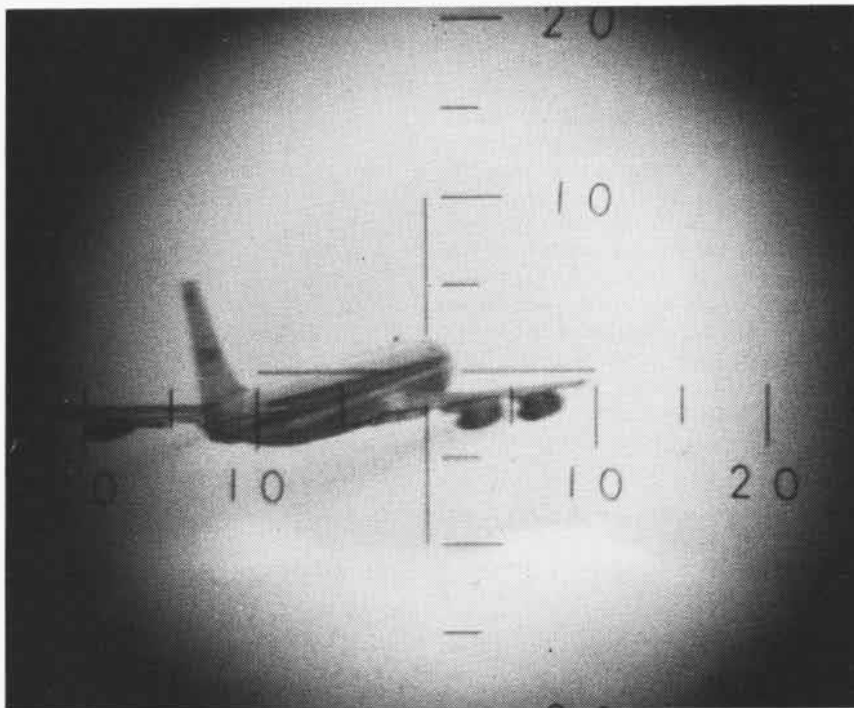
Corsair II squadrons have won the McClusky Award three out of its four years of existence.

Recalled to Duty

Inside a van parked at O'Hare International Airport, men peered through periscope anti-aircraft gunsights at passenger jets flying in and out of the busy airport. A switch was thrown and radar locked onto the target. There was no sound of cannon fire, no puffs of black smoke. There were no guns.

They had been replaced by cassette tape recorders and other non-hostile gear. FAA technicians were using equipment of WW-II vintage to follow and record the flight paths of commercial planes as part of a study of noise-abatement procedures. Scrapped by the Army, the equipment was rescued from a military graveyard in Fort Huachuca, Ariz., about three years ago by John Baird of the Flight Standards Division, Aeronautical Center. He used components from two units to make one good system.

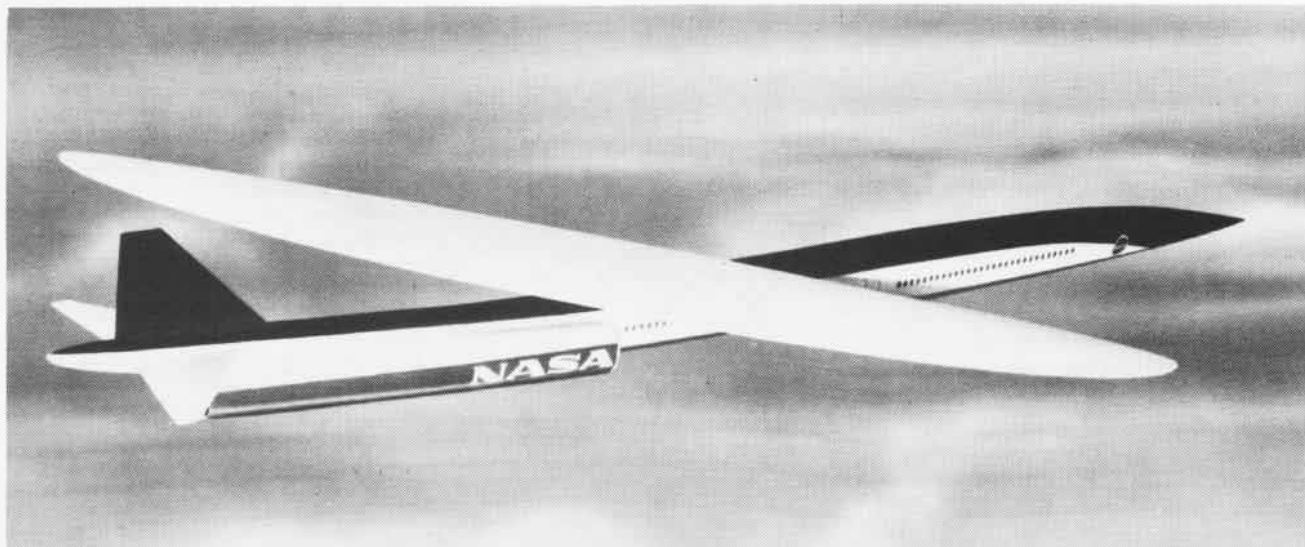
Pressed into service for peaceful purposes, APTAR (aircraft position tracker



and recorder radar system) hit the road late last summer via a flatbed truck for field testing at Minneapolis-St. Paul International Airport (Wold Chamberlain Field) and then at O'Hare.

In checking noise-abatement flight paths and tracking FAA aircraft flying multiple approach paths, one man sights the plane, lines it up in the viewfinder's cross hairs and locks it onto the radar. At the same time others operate the radar antenna and listen to tower communications to keep abreast of the flights. Then with the radar locked onto an aircraft, the equipment actuates a tape recording sequence which is processed to show the plane's altitude and position along its route up to a given number of miles.

The mobile unit has also tracked missiles, research aircraft flying in severe storms and commercial planes on landing-approach training flights.



Advanced Swing-wing

NASA's scissor-like, swing-wing aircraft configuration may provide solutions to a number of transport aircraft problems.

The wing and fuselage of the radical concept relate to each other like the two halves of a pair of scissors. The straight wing is mounted above the body and can be turned to various oblique angles for best performance at different flight speeds. For slower flight, the wing would be fixed at right angles to the fuselage, allowing landings and takeoffs with a minimum of power and noise. The merits of this concept have been established through several years of intensive analyses and wind tunnel investigations at NASA's Ames Research Center.

Because the new design can operate with maximum efficiency over such a wide speed range with great operating flexibility, it could provide shorter flight times with little increase in overall fuel consumption. Such combinations of speeds and schedules could produce significant fuel savings by using the fuel economy of straight-wing flight in such situations as holding patterns.

Recon Pod

An egg-shaped structure hanging under the wing of an A-7C aboard *America* was a pod containing equipment to photograph areas of the earth's surface. This tactical airborne reconnaissance pod system (TARPS or recon pod) is another approach to tactical reconnaissance. It can be readily mounted on the plane and just as readily removed.

The pod contains three types of sensors: frame and panoramic cameras, and an infrared line scanner for night photography. Following a reconnaissance mission, the film is processed and analyzed for intelligence information.

The Naval Air Development Center, Warminster, Pa., is tasked with demonstrating the feasibility of using a recon pod externally mounted on an aircraft. The project is supported by the Naval Weapons Center, China Lake.

After satisfactorily completing carrier suitability tests in August 1974 at the Naval Air Test Center, Patuxent River, Md., TARPS was demonstrated aboard *America*. LCdr. Dennis Laack, project director, reported that the recon pod made every scheduled launch and yielded good photographic imagery.



GRAMPAW PETTIBONE

Pine Trees in the Clouds

The two pilots arrived in the ship's ready room at the crack of dawn to brief for a practice two-plane navigation flight to a pre-assigned target in their A-7 Corsairs. The assigned flight leader decided to allow his wingman to fly as lead aircraft for training purposes. Preflight, start and launch were uneventful. The flight arrived at its first checkpoint at FL 310 and proceeded along its route.

Approximately one hour after take-off, the flight was in touch with center and was cleared for an en route descent from FL 310 to 5,000 feet. In the descent, the flight was switched to local GCA. After reaching VFR conditions at 6,500 feet, the flight was radar vectored to and passed over an airfield at 4,000 feet. After passing over the field, the pilots began the low level portion of the route. The wingman (actual flight leader) was flying a position 3,000 feet aft at five o'clock, slightly stepped up, from the leader (flight leader under training).

At a designated point, the flight turned on the final leg to the target and power was reduced and airspeed slowed to approximately 300 knots. The flight, at this point, was tracking one to two miles south of the course and passed one or two miles southeast of the intended practice target. The lead aircraft did not see the target; the wingman told him to come right, that it was at three o'clock. The leader rolled ten degrees right wing down and, as our wingman was attempting to rendezvous, the leader flew into a fog bank and low clouds. The wingman broadcasted that he was pulling hard right and climbing.

Shortly after, the leader flew into the cloud/fog bank in the ten-degree right wing down attitude; he struck one or more pine trees. He felt a small buffet of the aircraft which he mistakenly attributed to low airspeed and the angle of bank. At this point, he commenced a full power climb to VFR



*Shape up,
or Ship out!*

*Kind Valentine
greetings from
gramp.*

conditions on top (reached at 11,000 feet MSL) and proceeded to rendezvous with his wingman. The Corsairs effected a rendezvous at 12,000 feet. The wingman noticed damage to the left leading edge flap during the rendezvous.

The wingman now took over as leader and the flight proceeded immediately back to the ship. Our leader requested a tanker and the flight was refueled. The pilot of the damaged A-7 now conducted slow flight and found the Corsair completely controllable. The two A-7s trapped back aboard without further incident. The aircraft sustained substantial damage.



Grampaw Pettibone says:

Sufferin' catfish! Talk about Lady Luck smilin' on someone — you coulda' got kilt! It's one thing to give

a lad the lead for training purposes; it's something else to get there and be of no help at all.

The senior pilot flying as wingman has the responsibility of providing training and most of all supervision. Appears to me the supervising pilot could have at least given the young gent some "instructions" when he flew into the fog bank. Appears we had "fog" in the cockpit along with outside. As for the pilot — looks to me like you missed something, Bub, when you took your instrument training — ever hear of SCAN? Look alive!

Nostalgia

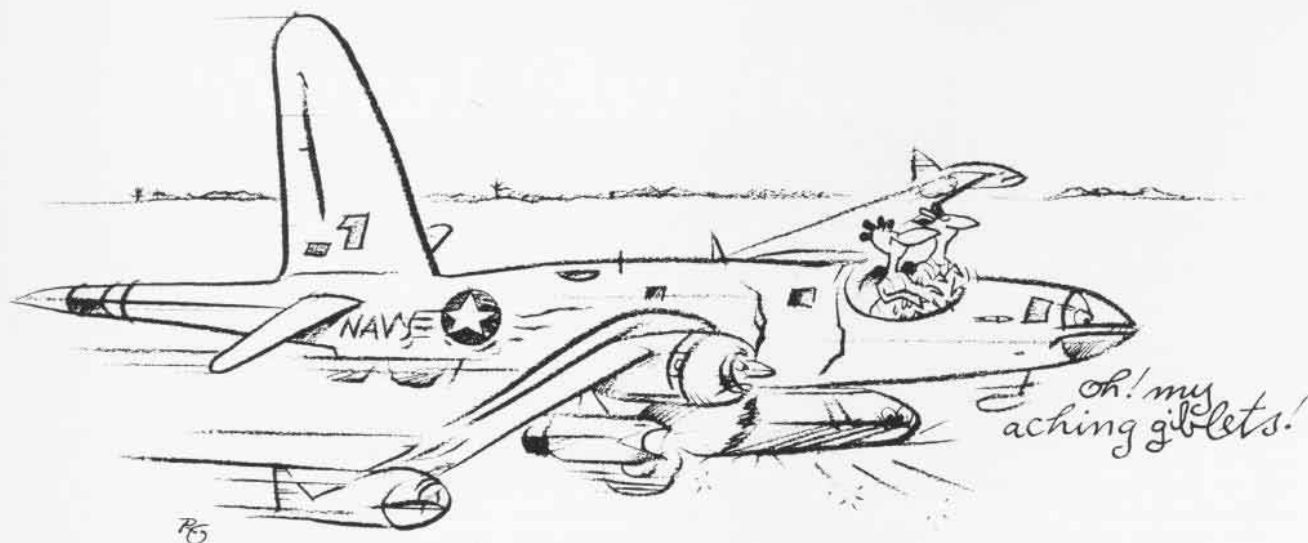
While on a dive-bombing flight, the pilot of an SB2C-1C noticed a loss of hydraulic pressure and requested permission to proceed to a nearby field. Prior to landing, he lowered the gear by closing his main system hydraulic valves and opening the No. 3 bypass valves. He failed, however, to close the No. 3 valves, so that in landing, he received brake pressure from the brake accumulator only. This was insufficient to maintain control and the plane groundlooped, but without doing any damage.

Upon discovering that there were insufficient repair facilities at the field, the pilot immediately took off again and proceeded to the base field. On landing the second time, the pilot didn't have enough brake pressure to keep the plane from swerving into a ditch, where it was damaged almost beyond repair.

From the pilot's statement: "It is my opinion that the whole accident can be laid to the fact that I did not familiarize myself enough with the SB2C hydraulic system and consequently did not close the No. 3 valves after using them."

The Trouble Board pointed out that the pilot had two good chances of preventing this accident: first, by knowing how to operate his hydraulic system and second, by having sense enough to stay on the ground when he found, or the first landing, that his brakes were defective.

ILLUSTRATED BY *Opbom*



Oh! my aching gullets!



Grampaw Pettibone says:

This is a warning for all pilots. Anyone not completely familiar with his hydraulic system should rectify this serious deficiency immediately. Where hydraulic systems are complicated, a squadron lecture and demonstration would appear to be in order.

The lack of common sense, mentioned by the Board, is another matter and you can't pick that up from a lecture. Experience is the best substitute, but you even have to mix a little brains with that to produce good judgment. This pilot had plenty of experience (575 hours), but he certainly didn't use his bean when he took off the second time. (June 1944)

With These Hands

A P-2 *Neptune* crew assembled for a brief prior to a scheduled five-hour local training flight. The pilot crew consisted of the plane commander, with an extensive amount of experience in the P-2, and a copilot who was a designated third pilot. The brief, preflight, start, taxi and takeoff were uneventful.

The first portion of the flight consisted of communication familiarization training. This lasted approximately three hours and then the crew headed for home plate. With the plane commander in the copilot's seat acting as the instructor (IP) and the third pilot in the pilot's seat acting as the pilot under instruction (PUI), they entered a touch-and-go pattern.

The P-2 completed two normal GCA touch-and-gos and then made a touch-and-go which was not in accordance with NATOPS in that the landing gear and props were adjusted in the wrong place during the landing sequence. Despite these incorrect procedures, the pilot demonstrated satisfactory airmanship.

Upon completion of the touch-and-go, the IP took control of the aircraft from the right seat in order to demonstrate the traffic pattern and landing procedures. The PUI was instructed to just sit there, that the plane commander would do everything during the approach and landing sequence.

The tower cleared the P-2 for landing just as it passed the 90-degree position. A normal touchdown was made. After touchdown, with the nose wheel on the runway, the plane commander moved the flap handle to ten degrees, advanced the jets to 100 percent and started to advance the recip engine throttles.

At this point the plane commander noticed that the pilot in the left seat had his hand on the gear handle which was out of the down detent position. Almost immediately the aircraft passed over an arresting gear cable and the nose started to fall through as the nose gear collapsed.

Although airspeed was approximately 95 knots, the plane commander was unable to hold the nose up with full back yoke. As the propellers and the radome struck the runway, the

plane commander closed the reciprocating engine throttles, secured the jets and ordered the left-seat pilot to bring the mixtures full aft.

The plane commander maintained directional control with the rudder until it became ineffective. He then applied brakes, to keep the aircraft on the runway. The aircraft came to a stop after 3,500 feet and the plane commander ordered the crew to evacuate the aircraft.

The pilots exited through their overhead hatches. There were no injuries; however, the aircraft was damaged beyond repair.



Grampaw Pettibone says:

Holy Hannah! What a dumb cluck or should I say two dumb clucks! First of all, the aircraft commander was going to make an "unassisted" landing, which is non-NATOPS. Then, all of a sudden, the other pilot decides that he should help the gent out. He sure did — by moving the gear handle while still on the deck! With friends like this, who needs enemies?

It seems like, in flying multicrew aircraft, particularly transports and patrol types, we run across a pilot who doesn't know what to do with his hands, so he puts them where they don't belong. Beware of this type!

All in all, I would have to say that these two gents deserve each other. However, I don't believe Naval Aviation needs them.



GRAMPAW PETTIBONE

Crew Uncoordinated

A young Naval Aviator instructor and his student completed the briefing for a familiarization flight in a T-28 *Trojan*. As is customary, the student occupied the front seat, with the instructor in the rear. Preflight, takeoff and the flight en route to the training area were uneventful.

The student commenced his high work which included normal turn and GCA patterns, and approach turn stalls. Next, the instructor pilot took control of the aircraft to descend below 5,000 feet in order to demonstrate the high altitude engine failure maneuver. Upon completion of that demonstration, the student conducted a practice precautionary emergency landing. Then, while the *Trojan* was en route to another field, the instructor demonstrated a simulated low-altitude engine failure maneuver from cruise configuration. Following touch-and-go landings, the instructor initiated another simulated low-altitude engine failure which the student handled without any major difficulties.

When the *Trojan* was en route home

at 3,500 feet, with the student at the controls, the instructor began another simulated high-altitude engine failure, reducing the engine throttle and announcing, "You have a simulated engine fire."

Confused by the sudden, unexpected initiation of another simulated emergency maneuver en route to home field and unsure of the simulated emergency stated by the instructor pilot, the student asked, "Engine failure?" The instructor replied, "Engine fire."

The student proceeded to actually perform the NATOPS procedural steps for securing the engine in the event of an actual inflight fire (including turning off the mixture and fuel control). He announced each step over the ICS as he performed it.

At approximately 1,200 feet msl, the pilot took physical control of the descending aircraft to start wave-off from the simulated emergency descent. When he moved the engine throttle level forward to add full engine power, the engine did not respond. Looking at the throttle quadrant, apparently for the first time since beginning the simulated emergency maneuver, the in-

structor noted the mixture control lever at the *idle cutoff position* and asked the student, "Did you shut the mixture off?" He answered, "Yes," and the instructor advanced the mixture control lever to the full-rich position. The engine still failed to respond and so the instructor manipulated the throttle lever in an effort to restart the secured engine.

Meanwhile, the student, now realizing that he had secured the engine erroneously, turned the engine ignition switch to "both" and the D-C electrical power switch to ON, though he did not have electrical control. Neither pilot looked at nor touched the fuel control handle on the left console which had previously been turned off by the student pilot.

At approximately 600 feet msl without scanning control handles and switches in the cockpit and deciding that the engine could not be started the instructor committed himself to a forced landing straight ahead along the flight path into dense trees. The aircraft traveled approximately 500 feet forward from the point of first contact.

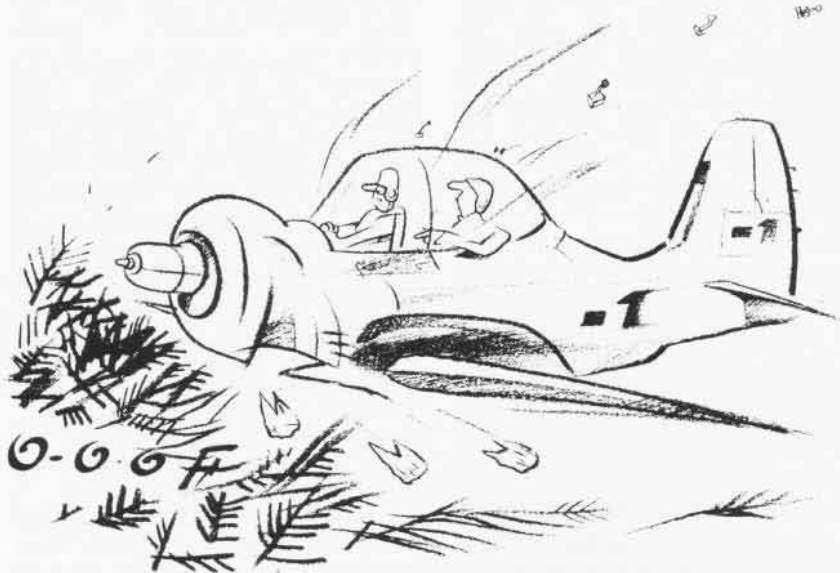
Fire erupted within seconds following ground impact of the fuselage and spread rearward along and into the disintegrated fuselage. The student evacuated with some difficulty followed by the instructor. Both pilots sustained burns.



Grampaw Pettibone says:

Great grumblin' gremlins! This must surely be one of the greatest stories of crew uncoordination in the history of Naval Aviation. For the life of me, I can't understand how the student could move so many switches (mixture, mags, fuel switch, etc.) and not have the instructor see at least one! Where the heck is your scan? Sure you gotta look out for other traffic, but you gotta watch the "store" too.

It's amazing how these two lads worked like beavers to booby-trap themselves: the student, who had no indication at all of a fire, secured the engine which is what you would expect of a student on his first ride; and, of course, our ever alert instructor who missed every switch that the student moved. These two guys deserve each other because Naval Aviation don't!



Naval Aviation 1974

~

a Pictorial History

By
Clarke Van Vleet
Aviation Historian





Two new aircraft, the F-14 and the S-3, joined the fleet during the year. Following completion of *Project Up*, launched in January 1974 to prepare for deployment, the *Tomcats* of Fighter Squadrons One and Two deployed in September aboard *Enterprise*. Meanwhile, Air Antisubmarine Squadron 41 accepted in February the first Lockheed S-3A *Vikings*.







The female counterparts of Ellyson, Rodgers, Towers and Knapp (Naval Aviators #1, 2 and 3 and Helo Pilot #1, respectively) were born (airborne, that is) during the year. Barbara Rainey (nee Allen) was the first of the females to win her wings, February 22. Judy Neuffer donned hers five days later — and has since flown into the eye of a hurricane. Jane Skiles was the third of the fairer sex and now flies with VR-24 out of Rota. Joellen Drag, #4, was also the first to qualify as a helo pilot, April 19.



Jane Skiles



Barbara Rainey



Judy Neuffer



Joellen Drag



After setting a duration record of 84 days in space, *Skylab IV* splashed down on target, February 8, 180 miles southwest of San Diego. Astronauts Lieutenant Colonel Gerald Carr, USMC, C.O. of the mission, Dr. Edward Gibson, civilian, and Lieutenant Colonel William Pogue, USAF, were recovered by an HC-1 helo and flown aboard *New Orleans*. It marked the 32nd astronaut-retrieval by the Navy since the space program began in 1961.



Ex-fighters turned trainers, the TF-9J *Cougars* flew their final days with an active unit, VT-4, in February. The VT-4 cats, whose forebears flew in Korea, retired to storage in Arizona to be lashed down. In April another old bird, of 1945 vintage, an R5D (C-54) *Skymaster*, was discharged to the desert cemetery.





During the year, active aircraft carriers numbered three CVs, ten CVAs, one CVAN and one CVT. *Nimitz* (CVN-68) and *Eisenhower* (CVN-69) continued under construction; CVN-70, still under development, was officially named *Carl Vinson* in February. *John F. Kennedy* commenced a year's overhaul in March. She is being converted to a CV. *Intrepid* was decommissioned the same month after over 30 years of service. *Kitty Hawk* completed a tour in the Indian Ocean in April employing the full CV concept, and *Constellation* entered the Persian Gulf in November, showing a significant presence there. *Yorktown*, decommissioned in 1970, was turned over to Charleston, S.C., for the city's proposed naval museum.

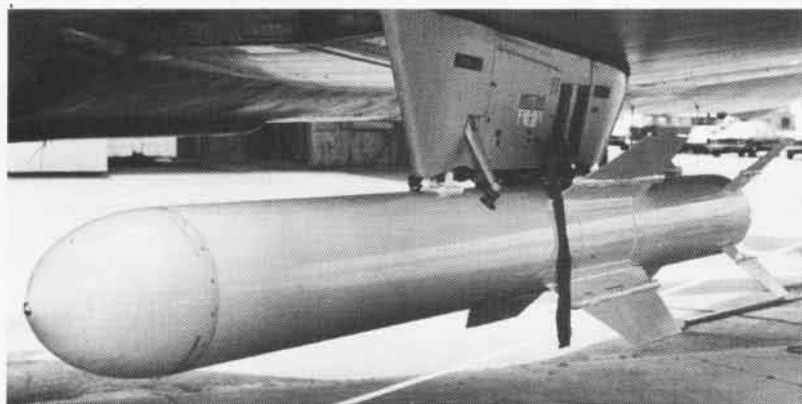




The ups and downs of V/STOL and advanced helicopters continued to be tested during the year as the old "examining board," USS *Guadalcanal*, again took on various aircraft for evaluation. The Canadian-built CL-84 tilt-wing craft and the UH-1N, AH-1J, CH-46D and RH-53D performed ship-board suitability tests during March. Joint USN/West German tests began in July on the VFW-Fokker VAK-191B in Manching, Germany, and in August Sikorsky's new YCH-53D carried 17.8 tons, the heaviest load lifted by any Western World aircraft.

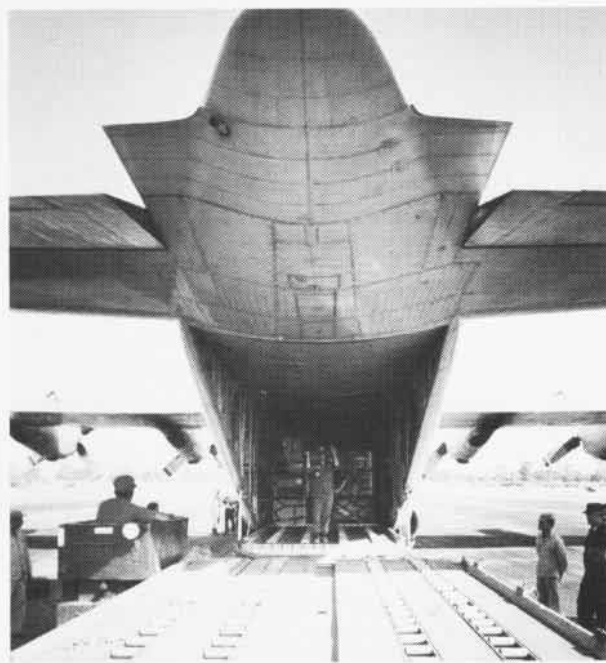


The first Navy *Harpoon* missile fired from a P-3A *Orion* scored a direct hit on a remote-controlled *Septar* target boat April 11 at the Naval Missile Center, Point Mugu, Calif. Operational evaluation of the new air-surface, subsurface-to-surface, antiship cruise missile will begin in July 1975.





RH-53 *Sea Stallions* of Helicopter Mine Countermeasures Squadron 12 began sweeping mines from the Suez Canal in April as part of Operation *Nimbus Star*, following the ceasefire in the Middle East. Four C-130 *Hercules* of VR-24 Det Rota supported the *Nimbus Star* (water) and *Moon* (land) operations as well as *Nimrod Spar*, the salvage ops conducted by a civilian contractor under Navy supervision.



Marine Aviators, pilot John H. Pierson and copilot David Shore, broke a distance record in Class C-1-f, Group II (turboprop), by flying an OV-10A *Bronco* 4,480 kilometers from NAS Whidbey Island, Wash., to Homestead AFB, Fla., on July 5. Because of improved performance the *Bronco* is now believed capable of "bucking" the Atlantic Ocean.





Like most summers, 1974's was a time of personnel changes and milestones. The Honorable J. William Middendorf succeeded J. W. Warner in June as the 62nd Secretary of the Navy. He was briefed on the F-14 by Rear Admiral O. M. Oberg. Also in June, retiring Chairman of the Joint Chiefs of Staff, Admiral T. H. Moorer, passed the Gray Eagle Trophy to Rear Admiral L. V. Swanson, the most senior Naval Aviator on active duty. That same month, Vice Admiral W. D. Houser, DCNO (Air Warfare), presented retiring CNO, Admiral E. R. Zumwalt, with a pair of symbolic Naval Aviator's wings. Admiral J. L. Holloway III, a Naval Aviator, was named the new CNO. Rear Admiral A. B. Shepard, Jr., America's first man in space (May 5, 1961) and the fifth of twelve to walk on the moon, retired from the Navy in August. The only enlisted pilot left in the Navy is Master Chief Air Controlman Rob Jones, who won his wings in 1947. He is the last of the enlisted Navy pilots who numbered 920 at their top strength in 1950. Jones passed his 10,000th flight hour mark in October 1974.



Adm. Holloway



VAdm. Houser and Adm. Zumwalt



RAdm. Swanson and Adm. Moorer



SecNav Middendorf, RAdm. Jones



RAdm. Shepard



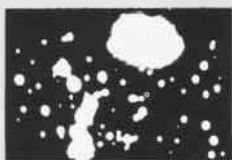
ACMC Rob Jones



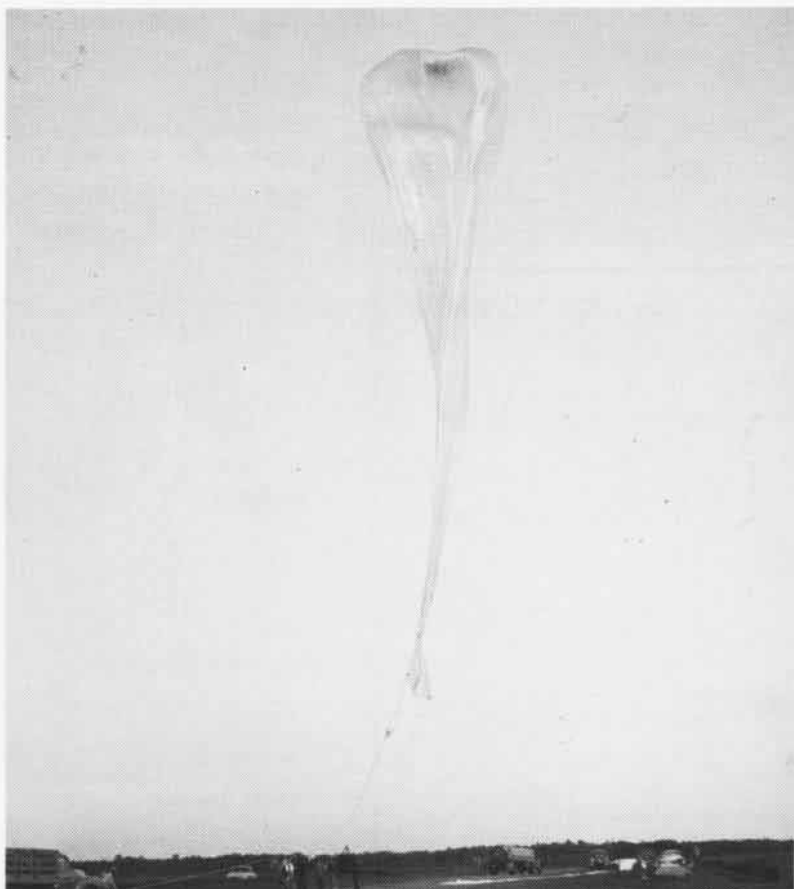
reminds all aero units that OpNav-Inst. 5750.12, Command Histories, are due on March 1, 1975.



As a result of the conflict between Turkish and Greek Cypriot forces on Cyprus, Marine helicopters from the Sixth Fleet amphibious helicopter carrier *Inchon* began evacuating some 300 American citizens from the British base at Dhekelia, Cyprus, July 22. Evacuees were flown to a five-ship U.S. amphibious group composed of *Coronado*, *Trenton*, *Spiegel Grove*, *Saginaw* and *Inchon*.

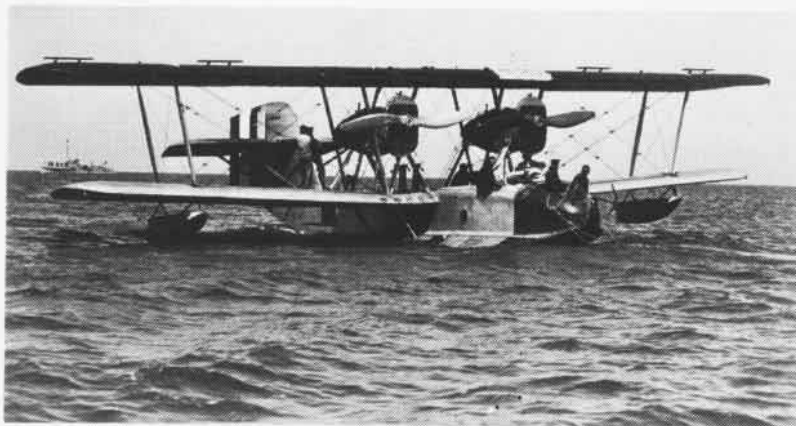


The Navy's navigation satellite system marked its tenth anniversary in July. Public users in 1974 surpassed 500, up by 230 from 1973. In another development in the stratosphere, utilizing Navy's *Skyhook* program, ONR and NASA sponsored a flight of the world's largest balloon — volume 50.3 million cubic feet — at Fort Churchill, Canada. During the year both agencies performed other stratospheric balloon tests. A count in August of those objects in space, or near earth orbit, totaled over 3,200, up from 2,954 in 1973. The number is expected to reach 10,000 by the year 2000. And UFOs?

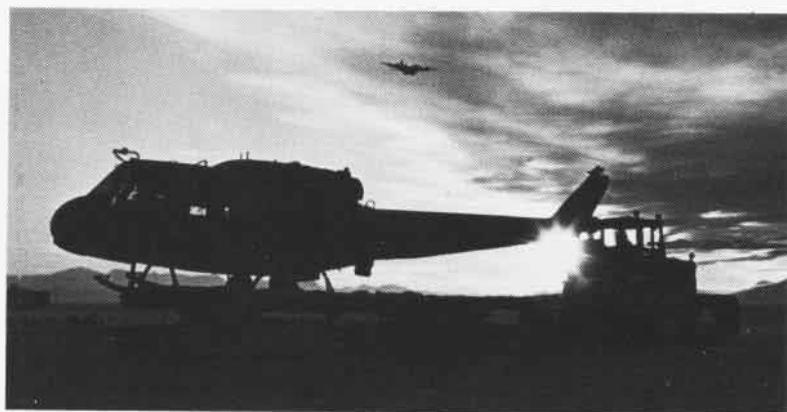




On September 10, the field at NAS Barbers Point was officially named after John Rodgers, Naval Aviator #2, who 49 years earlier flew and sailed a PN-9 seaplane from San Francisco to Honolulu setting a distance record for the longest overwater flight. Although his aircraft ran out of fuel after flying 1,841 miles, he sailed the plane the remaining 450 miles to its destination. His feat rejuvenated interest in the flying boat and spurred the idea of commercial overseas flight.



Another historic milestone was passed in September as Operation *Deep Freeze* celebrated the beginning of its 20th year on the ice of Antarctica. The National Science Foundation takes over all operations at the South Pole next year, so this season also marks the last time Navy crews will winter over at the polar tip of the Great White Continent. It was there that Rear Admiral Richard E. Byrd, polar pioneer, explored in the 1920s and 30s.





In November, *Midlink 74*, a Central Treaty Organization (CENTO) exercise, got under way as the largest naval exercise ever held in the Arabian Sea. Participating were forces from Iran, Pakistan, Turkey, the U.K. and U.S. USS *Constellation* was included in the eight-ship American force. The exercise tended to balance Soviet presence in the area — manifested by the deployment of the U.S.S.R.'s helicopter carrier *Leningrad* to the Indian Ocean. The Russians have naval and/or air facilities in Aden, on Socotra and in Somalia. The U.S. has facilities on Diego Garcia and in the Persian Gulf.



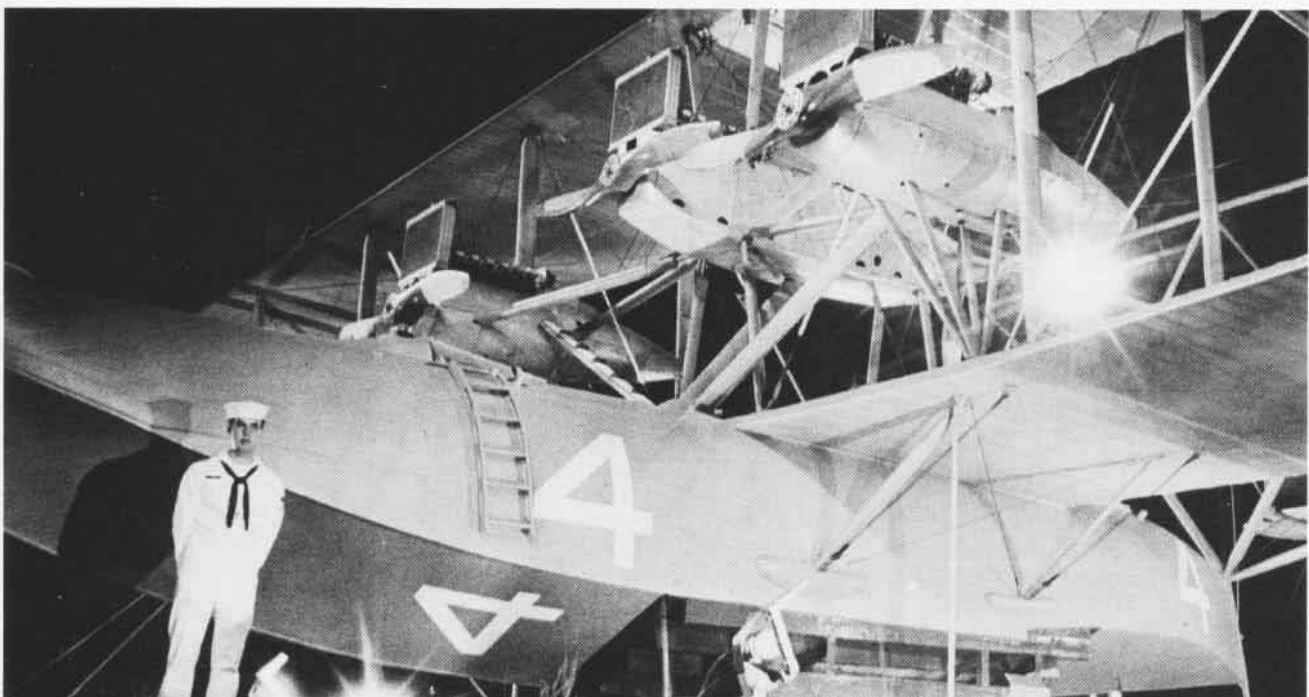
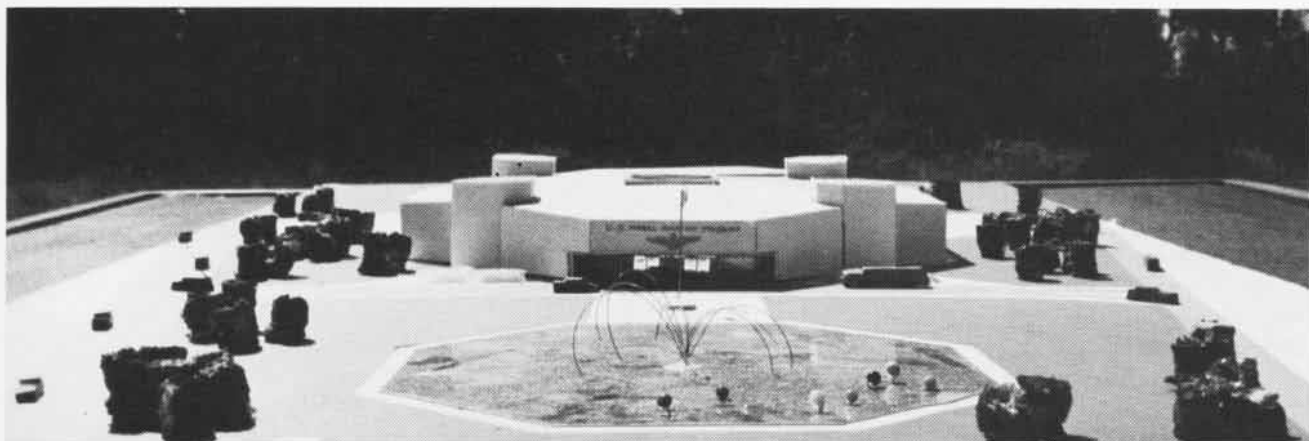
In addition to the two 18,000-ton helo cruiser carriers (*Leningrad* and *Moska*) in the Russian fleet, the Soviets continued work on three new 40,000-ton *Kuril*-class carriers (artist's concept at right). *Kiev* reportedly started trials in the Black Sea and a second, believed to be named *Minsk*, is said to have been afloat at the Nosenko Naval Yard. A third keel has reportedly been laid down on the same slipway.



T. A. Gaussiran



Construction of the new Naval Aviation Museum at NAS Pensacola was completed and the Museum unofficially opened in December. The official dedication ceremony is scheduled for April 1975. The column-free structure, measuring 68,000 square feet, houses over 30 vintage aircraft. One of the main attractions is the original NC-4, the first airplane to fly across the Atlantic, back in 1919. Adorning the walls and ceiling of the museum will be the "Story of Naval Aviation," a chronological sequence of presentations covering the story of Naval Aviation from its birth to the present and beyond. The presentation is being developed by designer Joseph Cason of Exhibit-group Cincinnati, Inc., collaborating with CNO's Aviation Historian, Clarke Van Vleet. Director of the museum is recently retired Captain Grover Walker to whom contributions, money or memorabilia, may be sent in care of the Naval Aviation Museum Association, Inc., Pensacola, Fla. 32508.



NAVAL AIRCRAFT

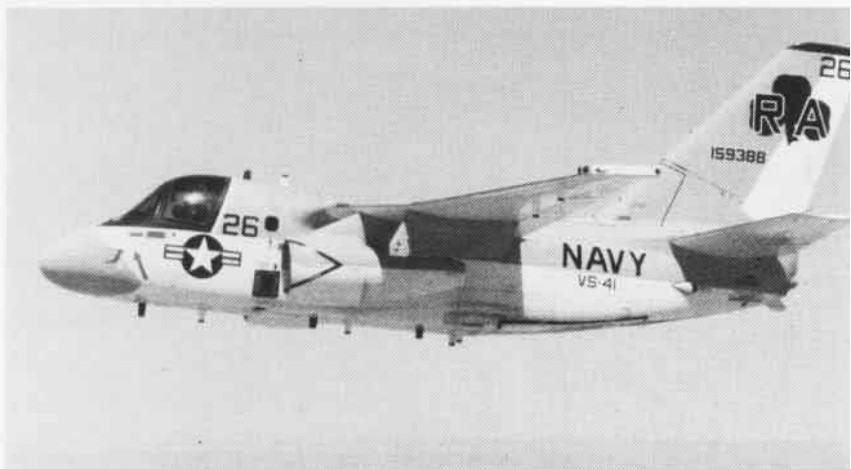
VIK

"The Vikings are coming!" is a popular sign around any VS squadron area these days. Actually a number of Lockheed S-3As are already here but many more are to come before the last reciprocating-engine-powered S-2 Trackers will fade from the scene. Every other segment of Naval Aviation has seen some form of replacement aircraft since the S-2 went into service over 20 years ago. Finally the VS squadrons are having their opportunity to introduce a totally new operational capability.

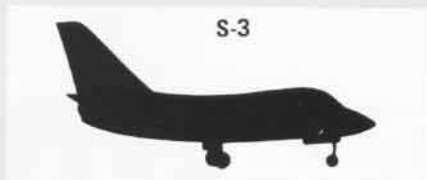
The VSX program started in 1968, and, in 1969, Lockheed was awarded the contract to develop the Navy's new carrier-based, fan-powered ASW aircraft. It was designed to incorporate the latest concepts in sensors and in computer-based data processing, display and weapons control systems, and in enabling the four-man crew to effectively deal with the anticipated submarine threat.

The Viking has all four crew members seated on ejection seats. The pilot's controls include a control stick in place of the traditional wheel. The slightly swept wing and General Electric TF-34 fan engines provide the S-3A with long-range or on-station endurance at cruise speeds and altitudes typical of subsonic jet aircraft. Inflight refueling through a retractable refueling probe can be used to further extend its mission performance. Folding wings and vertical tail provide carrier handling flexibility.

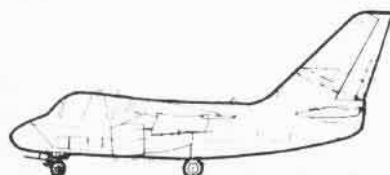
Already tested in prototype form as a tanker, the S-3A airframe shows promise of being adaptable to other roles—a characteristic for which its S-2 predecessor has long been noted.



ING



Length (max boom stowed)	53' 4"
Height	22' 9"
Wing span	68' 8"
Engine/thrust	two TF34-GE-2
	9,275 lbs. each
Maximum speed	447 kts.
Cruise speed	350 kts.
Ceiling	40,000'
Combat radius	450 nm.
Search time (approximate)	4.5 hrs.
Ferry range (with external tanks)	3,370 nm.
Armament	5,000 lbs. ordnance on two wing store stations
	2,400 lbs. (max) ordnance on four bomb-bay stations



ups and downs





at Norfolk's Aviation Physiology Training Unit

The devices appear to be as forbidding as torture instruments in a medieval dungeon.

The high-altitude pressure chamber resembles an isolation cell *à la* a James Bond movie. The ejection seat trainer looks like an upright rack for stretching the human body.

The swimming pool seems placid enough until you eye the blunt-nosed abbreviated cockpit perched atop a platform at one end. A slide-equipped apparatus descends from it at a less than gentle angle and leads down through the water's surface. This contrivance is perhaps the most notorious, by reputation and goes by a name known to generations of Navy flyers — Dilbert Dunker.

In truth, these implements at NAS Norfolk's Aviation Physiology Training Unit are designed to save lives. They are expertly-maintained, safely-controlled vehicles used to prepare pilots and aircrews for emergencies in the air and on the sea.

Normally, flying personnel must undergo physiology training every three years. Norfolk's unit, headed by LCdr. H. D. Brumfield, is typical of 13 other facilities at Navy and Marine locales in the U.S.

"Our primary concern," says Brumfield, "is to ensure the safety of the student when he is involved with our training devices." To assist him in this endeavor, he relies on 12 highly trained enlisted men from the PR, HM and TD ratings. He also has two officers aboard who, like himself, are designated aerospace physiologists in the Medical Service Corps.

The Navy has about 40 of these naval aerospace physiologists. They have received specialized training at NAS Pensacola and actually fly the T-34 through the solo stage to have

better command of pilot problems in flight. The syllabus they undergo is similar to that of flight surgeons.

The unit's syllabus usually requires a day and a half to complete. Training phases are quick-paced. The opening session includes lectures on the troposphere, that airspace below 30,000 feet, and the stratosphere, which lies above that altitude.

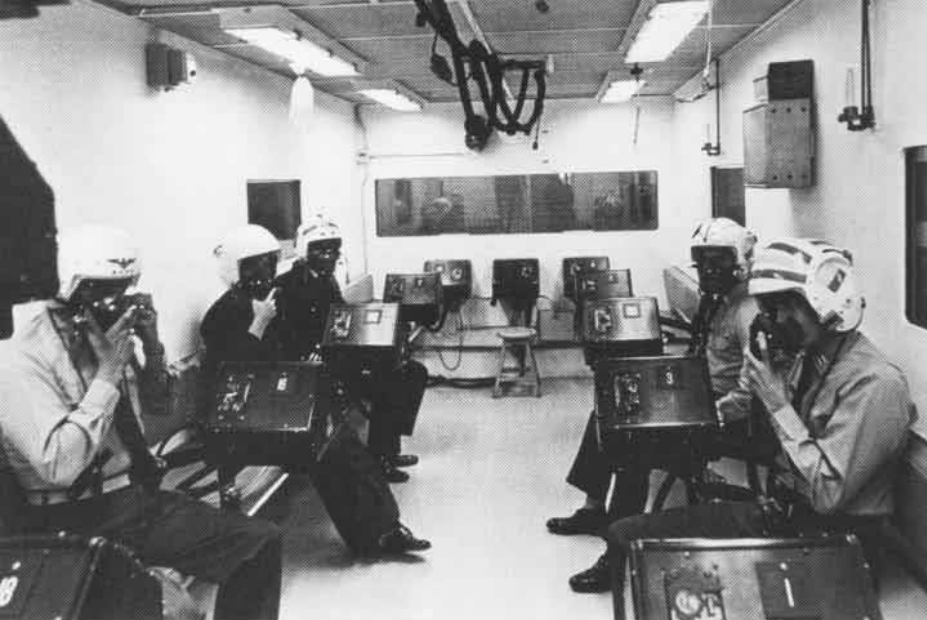
The perils of hypoxia and hyperventilation are carefully covered, followed by briefings on personal flight and survival gear. The chamber run is conducted following a brief on the sequence of events involved in "flying" to 40,000 feet and back without leaving the ground.

The chamber normally accommodates 21 personnel — 18 students, one physiologist and two enlisted technicians. It is equipped with individual oxygen/radio hookups and large windows through which technicians outside observe activities inside while monitoring various gauges.

For the first 20 minutes in the chamber, students breathe 100 percent oxygen prior to the ascent to altitude. Helmets and masks on, the participants' expressions are limited to what they can say with their eyes. While the students are oxygenating, a tape recording is played of actual transmissions between two pilots on a flight during which one of them suffers hypoxia and experiences gradual disintegration of his mental and physical faculties.

Then the climb begins to 40,000 feet at 5,000 fpm. A rubber glove, tied to the overhead, balloons to several times its size as the air expands.

On a typical run, Ens. William Etheridge, a physiologist on Brumfield's staff, and two instructors ride the chamber and monitor the behavior



of each student. A running narrative describing the phenomena of high altitude flight is transmitted on the intercom.

At about 35,000 feet, oxygen under pressure fills the lungs and pressure breathing by the students is required. Determined efforts are needed to exhale. Each student is directed to make a voice transmission, a considerable task under the circumstances.

The chamber peaks at 40,000 feet and after a few moments the descent begins. A level-off is made at about 30,000 feet. Here a volunteer is asked to remove his oxygen mask for a demonstration.

On a recent run there were no male volunteers, so the lone Wave aboard agreed to remove her mask. For nearly three minutes she was able to place playing cards, one at a time, into slots in a box properly annotated with the words Hearts, Clubs, Diamonds and Spades. Toward the end, the young lady's reactions slowed and she admitted: "I'm feeling light-headed . . . and my toes are tingling," but within seconds after placing the mask to her face she returned to normal.

An instructor was quick to point out that she performed equally as well as men volunteers.



Top, students prepare for pressure chamber ascent. Note glove which will expand several times its size during "flight." Above, student mounts rescue seat in pool. Right, flyer upended in Dilbert Dunker unstraps while safety personnel observe. Opposite page, left, ejection seat trainer is readied for shot; right, Norfolk's unit is headed by LCdr. H. D. Brumfield.



The descent continues and minutes later terminates back at zero altitude. It seems to have been a routine experience. Nevertheless the instructors have been extremely attentive throughout, watching for any possible emergency.

Says PR1 Jack Lake of the staff, "We seldom have any difficulties with the chamber or the students, but we're always on guard."

LCdr. Brumfield relates that his unit trained 13,249 personnel in fiscal year 1974 and his students have represented a broad spectrum of the aviation community.

"Black shoe admirals, for example," says Brumfield, "use our training to help prepare them for indoctrination flights they might make prior to taking overall command of surface and air units."

On a recent chamber run, students included a prospective carrier commanding officer, a selected air reservist, an Air Force flight surgeon, several fighter pilots, pilots and NFOs from an E-2 *Hawkeye* squadron, and a Wave.

An expanded, two-day jet indoctrination course is available for those who don't fly on a regular basis. These personnel include plane captains or sailors of the month who are awarded flights for their performance and combat camera group photographers

who require qualification for picture-taking chores aloft.

In the afternoon, lectures and a movie on ejection seat operations, briefings on flash blindness and visual or spatial disorientation are given after which students go outdoors for a "shot." Wearing torso harness, helmet and mask, each is strapped in the trainer and propelled up the rails by the force of a 37mm shell. Students actually pull the overhead face curtain or the alternate ejection handle on the forward edge of the seat to actuate the charge.

A flash blindness trainer consists of a simulated two-place, side-by-side cockpit with a large screen. Students are temporarily blinded by high intensity lights, demonstrating the effect of a nuclear blast or other phenomena, like lightning.

A swivel chair with lap belt is used to show the insidious nature of vertigo. Students close their eyes and tilt their heads at various angles while an instructor spins them, slows them down, reverses the spin and otherwise does his level best to ensure that the students becomes disoriented. Virtually no one can survive the befuddlement of this test which aptly exhibits the perils of vertigo or spatial disorientation.

Swimming occupies most of the

second day. Various techniques for swimming safely through burning oil on the ocean's surface, or lessons on how to float for long periods of time are explained and practiced. Students also learn how to react against concussion which may occur because of explosion.

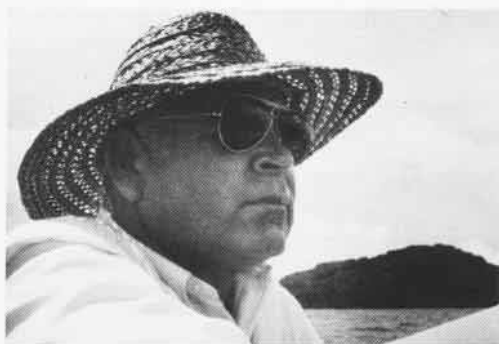
They learn how to mount a helicopter hoist and release harness fittings under tow, as is often the case at sea when a parachute filled with air hauls the survivor through the water.

Then comes Dilbert Dunker. The student is strapped in as he would be in an aircraft cockpit and sent headlong down the rails into the water. The Dunker flips over and the student must unhook himself and escape from his suddenly upside-down predicament. Aircraft which are ditched at sea may flip over in the same manner.

In any event, highly trained swimmers are on hand underwater to ensure that the student safely egresses. It is no secret that, over the years, many a Navy flyer has credited his being alive to the training he underwent in the Dilbert Dunker.

Aviation physiology training, be it for the veteran flyer or the neophyte yet to make his or her first venture in the sky, may pay handsome dividends in the event of an emergency.





TRUK REVISITED

Story and Photos by
JOC Bill Wedertz

George Blair sat in the comfortable hotel chair and reflected on those uncomfortable hours of 30 years ago. He had returned to Truk in the hopes of finding the F6F *Hellcat* in which he crashed on a combat mission during World War II. That endeavor was unsuccessful. The long trip was well worth the effort, however, if only to relive the exciting moments of February 18, 1944.

George Blair was a lanky dark-haired lieutenant junior grade then, assigned to VF-9 aboard USS *Essex*. He was part of Task Force 58 under the command of Rear Admiral Mark A. Mitscher who was aboard USS *Yorktown* (CV-10).

The day before, he had flown on a successful raid. He helped in the destruction of more than 250 enemy aircraft, many of which had been parked wing-tip to wing-tip on the islets of Moen and Eten awaiting ferry movement to Rabal. His VF-9 shipmates had failed to catch the Japanese Imperial Fleet at anchor but still managed to sink cruisers, destroyers and cargo ships as well as to inflict a damaging toll on aircraft.

The George Blair of today, peering out the window of the plush Truk Continental Hotel on Moen, recalls that "launch from the carrier was pretty much routine. After our rendezvous in darkness, we headed south arriving about daybreak in the Truk area."

Blair had no special reason to be apprehensive on this mission. He felt that, since the fighters had met little organized resistance from the Japanese

earlier on the first flight into Truk Lagoon, today's efforts would constitute a mop-up operation.

His flight maneuvered over the complex of atolls, searching for enemy shipping. The Japanese were ready. Antiaircraft fire erupted from the islands of Dublon and Fefan.

"They must have been aiming for the flight leader, as was customary," theorizes Blair. "It was sort of like skeet shooting, but they got me instead."

Three direct hits jarred his *Hellcat*. He fought to control his aircraft. He tried to make it to the outside of a reef, which ringed the island area, where a waiting submarine had been dispatched to retrieve downed flyers.

He didn't make it. His oil pump was damaged and, says Blair, "when the prop suddenly froze up, I knew I was finished." He did manage to get his *Hellcat* beyond Uman, the last large island to the south. He could see the outer reef in the distance just before his plane crashed in the sea.

He landed upright in the water and quickly released himself from his retaining straps and scrambled out onto the wing. He rapidly scanned the horizon and saw no sign of the Japanese. Then he reached back into the aircraft to retrieve his life raft but, before he could grasp it, the entire plane sank from under him, taking the raft with it to the bottom of Truk Lagoon.

"I then did two things," recalls Blair, "one smart, one dumb. I dropped my gun. I think that was smart because it had started to weigh

about 200 pounds. I could just see myself on the wing, pointing that gun at the enemy, saying 'Come and get me,' or racing up on Moen shouting, 'All right, you guys, stick 'em up!' But I should never have gotten rid of my shoes."

The shoes were very heavy and Blair felt he could afford to scuttle them. He thought rescue would be quickly forthcoming. Later, while staring down at his white feet dangling beneath him, he began worrying about sharks.

Says Blair, "If I were faced with it again, I wouldn't have dropped the shoes."

Meanwhile, his flight leader had alerted rescue units. Blair was comforted by the sight of nine fellow pilots circling overhead to mark his position. On the other hand, it became disconcerting when, a few minutes later, the Japanese destroyer *Fumizuki* appeared on the horizon. Blair distinctly remembers the ship lobbing 16 rounds of five-inch shells at him before VF-9's *Hellcats* drove the intruder away.

(Later that day, five *Enterprise*-based *Avengers* made a coordinated attack on *Fumizuki*, sending her to the bottom.)

The *Essex* fighters soon ran low on fuel and a relief patrol was summoned to the scene. For the next two-and-a-half hours, Blair kept afloat with his Mae West and maintained a constant watch on both the horizon and the sky.

Finally a scout plane from the cruiser USS *Baltimore* came to pick him up. The OS2U *Kingfisher* was piloted by Ltjg. Denver F. Baxter with

crewman Reuben F. Hickman in the aft seat, to assist in case Blair was injured.

Waterlogged and exhausted, but uninjured, the downed pilot was able to get into the plane without too much difficulty.

Blair remembers that "the crewman had a parachute and obviously the three of us couldn't fit into the cockpit at the same time. So he threw the parachute out and I sat on his lap for the trip back to *Baltimore*." He adds, advisedly, "Of course I was a bit trimmer in those days."

The rescue was not yet complete. Baxter had reduced his fuel load to allow for the extra weight of the crewman and to accommodate Blair. Also, an exorbitant amount of fuel had been expended in the necessary taxiing, takeoff and flight required to get to the rescue site.

"About 40 miles from *Baltimore*," says Blair, "we could see the ship.

Baxter turned around and said, 'I don't know if we're going to make it.' "

The ship turned 45 degrees into the wind to give the approaching *Kingfisher* a slick in which to land. Baxter banked his plane sharply in the approach. Blair hadn't anticipated the abrupt maneuver and was frightened. He thought, "Well, here I go again."

But the landing was successful even though the seas were rough. After the plane and crew were hoisted aboard the cruiser, the fuel quantity was checked. There was less than one pint of gas in the tank.

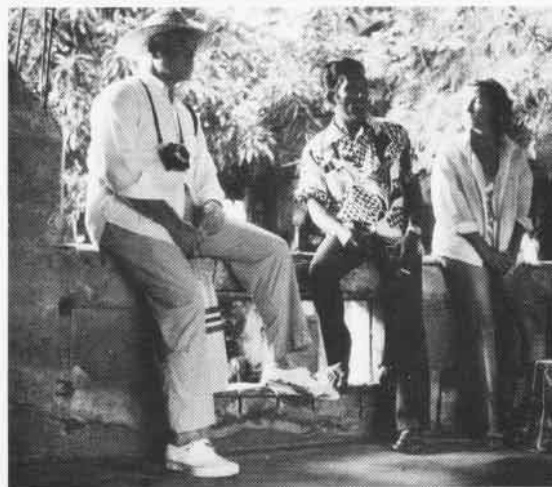
Ltjg. Blair was the first Navy pilot to be rescued from enemy-held territory in the Pacific. He continued to fly throughout the remainder of the war.

Blair left the Navy after the war and now owns an investment management business in Pittsburgh. He remained active in the reserves and commanded a jet squadron in Philadelphia. He flies private planes today.

About his journey he admits, "I always wanted to come back and see what the area looked like. Even from that fleeting glimpse I had in 1944, it looked like a lovely place and I wanted to see it from the ground."

He visited with natives of the islands who remember those days of fighting. Some of those natives now work both as tour guides and as certified divers. Buffs from all corners of the world come to the islands to peer at the underwater graveyard of ships and planes. Preserved inside the Truk Lagoon, which is 40 miles in diameter, are more than 199 ships, planes and submarines, the majority of them Japanese.

Personally, George Blair wonders about the fate of one lone *Hellcat*. He knows it is somewhere. However, no U.S. fighter aircraft has ever been located in the Lagoon. Surprising, says Blair, considering that "we lost a good many" in the two-day operation.



Left, Blair waits in aft seat while *Kingfisher* pilot, Ltjg. Baxter, and crewman Hickman maneuver aircraft for hoisting aboard *Baltimore*. Blair was first Navy flyer to be rescued from enemy-held territory in the Pacific. On trip from Truk Lagoon to cruiser, Blair sat on top of Hickman. OS2U had one pint of fuel at end of mission. Above, Blair and his wife listen as Lino Nedelec of Eten Island recounts tales of WW II fighting at Truk.

SUMMER SESSIONS

Taking a two-week vacation to go to work. Sound odd? Not if you are a Selected Air Reservist.

Each year, these electricians, farmers, chemists, pilots, insurance agents, trucking dispatchers and firemen set aside their normal occupations for two weeks' active duty for training in their second jobs.

Among the squadrons going on vacation to hone their skills as backup for regular naval air forces were VP-67, NAS Memphis, Tenn., and VP-68, NAS Patuxent River, Md.

Flight crews of VP-67, flying P-2H *Neptunes*, began their cruise at NAS Willow Grove, Pa., where they spent a week receiving antisubmarine warfare refresher training at the Naval Air Reserve ASW Tactical School. The ASW refresher training is required of crews at least every three years.

The school, the only one of its kind, is specifically tailored to meet Naval Air Reserve requirements. The courses are shaped to fulfill squadron and individual needs. The 44 courses

taught are of five types: operational courses for officers, enlisted aircrew positions, avionics maintenance, extended courses for aviation ASW operators and squadron cruises.

The VP squadron cruise course is considered one of the most effective. During a week of instruction, the squadron officers and enlisted flight crews receive an intensive classroom and team trainer update on ASW sensors and tactics.

A stop at one of the classrooms would find the squadron's *Julie*/ECM operators reviewing procedures for the AN/APA-69C direction finder system and the AN/ALR-8 narrow band receiver and fixed antenna system, or being brought up to date on various Soviet ships and aircraft.

Further down the hall in another classroom, *Jezebel* operators are briefed on Soviet advances in nuclear submarines or working with passive acoustic equipment.

For each seat in the *Neptune*, a similar scene can be found.

After a week in the classroom at Willow Grove, VP-67's crews headed for NAS Point Mugu, Calif., for a week of antisubmarine warfare flight operations.

"One of the primary exercises that allows us to prove our ability to find, track, localize and 'kill' a submarine is called a GradEx," said Commander Stanford L. Brown, VP-67's skipper. "In this particular exercise our target submarine conceals itself in an area of approximately 300 square miles — and we have to find it. The squadron completed five of these exercises successfully during this period."

During the cruise, VP-67 flew 300 accident-free flight hours. This included 190 hours of pilot training and 110 hours of ASW training.

Since being formed in November 1970, the squadron has had cruises to Rota, Spain, and Barbers Point, Hawaii, and participated in ASW exercises with Colombia, El Salvador, Guatemala, Nicaragua and Japan.

Patrol Squadron 68, which flies the



VP-67 , VP-68

P-3 *Orion*, had a split cruise to Rota, Spain. Flight crews of the port section flew the *Orions* nonstop to Rota and support personnel were airlifted across the Atlantic in C-141s by the Military Airlift Command. Less than four hours after squadron personnel arrived in Rota, all gear was unpacked and shops were set up for business. Planes were in the air flying surveillance missions the first day.

After two weeks, the squadron's starboard section was flown to Rota in C-141s and the port section returned home. The P-3s remained in the air, but with new flight crews. When the month was over, VP-68 had logged 1,050 flight hours.

Then the "vacation" was over. It was time for the engineers, computer repairmen, attorneys and policemen to return to their normal occupations. But they will not be away from their second jobs for long. The Selected Air Reservists will meet one weekend a month until it is again time to take a two-week vacation and go to work.



It's a tight squeeze in the SP-2H as a VP-67 aircrew prepares for takeoff, opposite. A squadron Neptune takes to the air during a training flight, top. AO1 Steven A. McMurry loads sonobuoys aboard an SP-2H, center. AMS2 Ron Olvis repairs a wing leading edge on a VP-67 Neptune, above. Squadron members of VP-68 unload their gear in Rota, Spain, left.



VFP-306

SHARPENS SKILLS

Photos by JO1 Russ Egnor, USNR

Every year reserve squadrons set aside two weeks for concentrated active duty training. Light Photographic Squadron 306, NAF Washington, D.C., is no exception.

In August, squadron personnel, under the leadership of Commander Alexander Wattay, arrived at NAS Miramar, Fighter Town USA. There it became a part of CVWR-30 which operated, for the most part, from NAS Fallon, Nev.

During the two-week period, the squadron took over 15,000 feet of aerial photographs of the Wing's Alpha

strikes and did aerial mapping of Lahontan Reservoir (near Fallon) and Cleveland National Park in Southern California. In addition, the squadron flew missions for VFP-63 and Fighter Squadrons 301 and 302, sorties in support of the Navy space program and location reference photographic support for the *Blue Angels*. The two weeks also included an overall readiness exercise.

Also recorded were the routine actions of squadron members as they went about their jobs.



VFP-306's active duty was a busy time. Left, LCdr. Tom Corboy, NARU North Island, acted as LSO. Plane captain and pilots discuss Crusader, above. LCdr. H. P. Fulton (facing camera) is a design engineer for a New Jersey company.

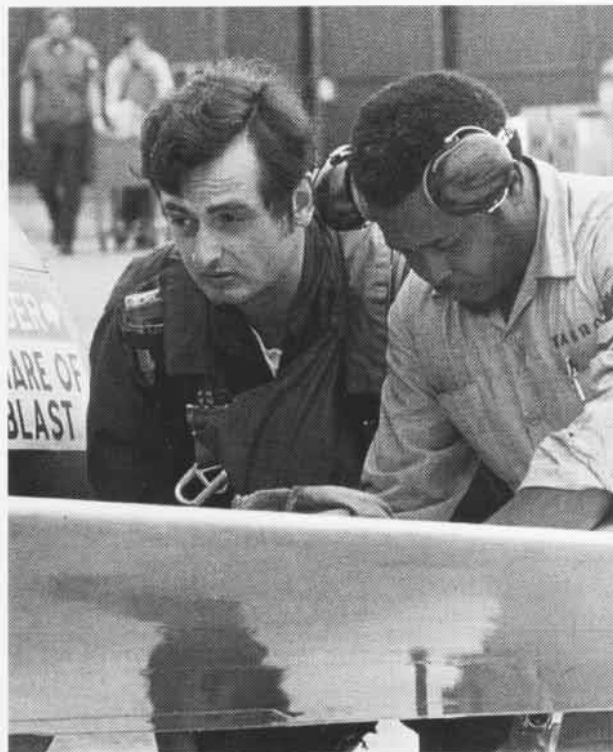


ADJ2 Richard Thomas hooks portable power cable to an RF-8G Crusader during a maintenance check. Ground personnel, while receiving on-the-job training, contributed to the 228.3 hours flown without a mishap.



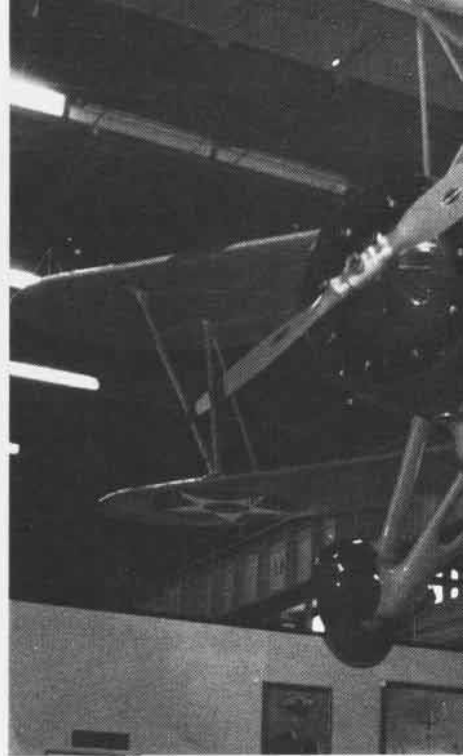
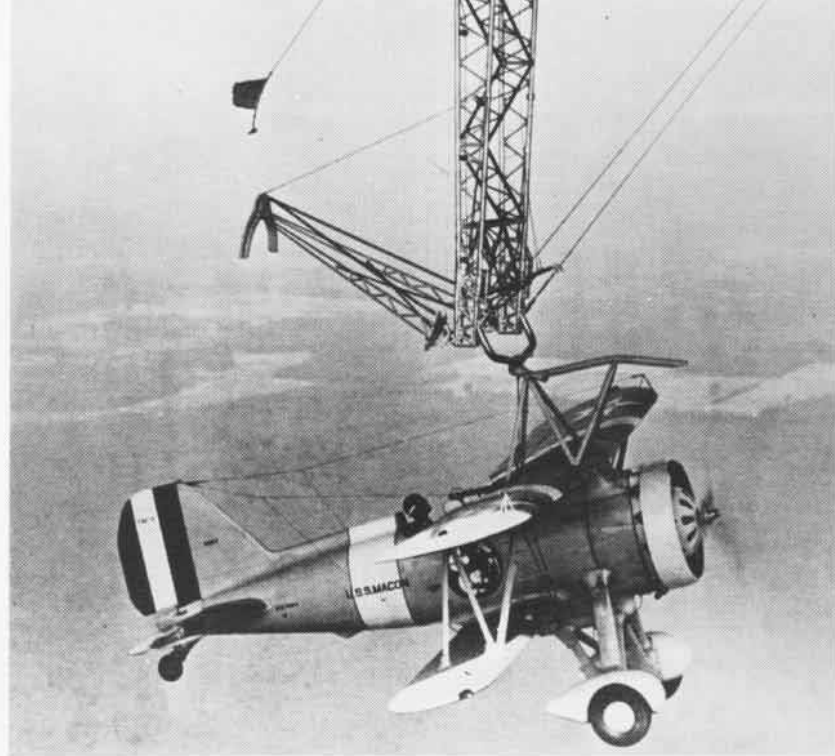
ADJ2 Theodore Willis, Jr., (left) and AMH1 Bradley Johnson verify information concerning a launch.

Cdr. Wattay, a civilian pilot with American Airlines, briefed his crew daily on schedule and events of the ORE. ADJAN Gregory Harmening runs LCdr. J. A. Weber through a pre-flight checkoff, below. Harmening spends most of his time as a diesel mechanic for General Motors in Pittsburgh, Pa. Below right, LCdr. K. M. Smith and AMS2 James Tabron inspect an aircraft during preflight.





LCdr. R. F. Norrell arranges gear in cockpit before a mission, above left. As a civilian, he flies for United Airlines. Above, squadron personnel during preflight ops. AMS3 George Barrett (left) wears another hat as a fireman in Montgomery County, Md. AMH1 James Ellis (center) is a housing inspector in Washington, D.C. AMS2 Anthony Ruppert is a sheet metal worker at Smithsonian Institution. At left, ADJAN Harmening takes oil sample from a Crusader.



SPARROWHAWK

In its time in history, the *Sparrowhawk* was literally the airplane on the flying trapeze, hanging by its "skyhook" from the dirigibles of the Thirties. The dirigibles are gone, but one *Sparrowhawk* remains, still hanging by its skyhook, this time from the ceiling of the Naval Museum at the Washington Navy Yard.

Although the F9C-2, above, bears BuNo 9056 on its tail, it is, in reality, XF9C-2 9264, the first - 2 model built and demonstrated to the Navy by Curtiss.

The story begins in 1935. With the loss of USS *Macon* and its *Sparrowhawks* on February 12, there were only three F9C-2s left. But their limited range, tendency to ground-loop and restrictions on aerobatics kept them from being flown very much and few hours were logged. Age began to tell and in 1936 the decision was made that the three should be delivered to O&R at NAS Norfolk for overhaul.

Two *Sparrowhawks* left San Diego, 9056 and 9057, but only 9056 com-

pleted the trip. The other ground-looped on a landing at Kingman, Ariz., but was repaired and proceeded to Albuquerque, N.M., where it nosed over, breaking fuselage, vertical stabilizer and strut. The usable parts remaining were later shipped to Norfolk. The third aircraft, 9264, flew in from Anacostia and the decision was made to overhaul 9056 and strike 9264. (This is when the mix-up in numbers occurred.)

Time marched on and 9056 was given to the Smithsonian Institution, displayed until 1959, then put in storage.

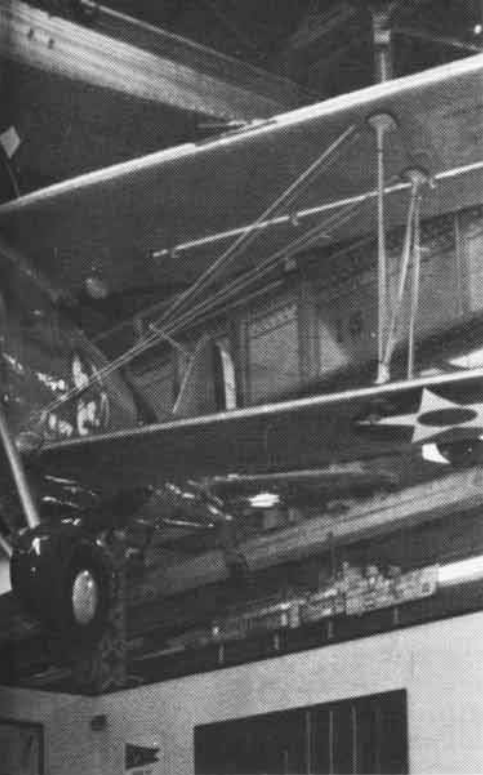
Early in 1971 it was determined that the *Sparrowhawk* should be restored and displayed in the National Air and Space Museum (scheduled to open in 1976). The Potomac Antique Aero Squadron took over the project and discovered the numbering discrepancy. The aircraft being worked on was 9264! (A more detailed account of the history of the *Sparrowhawks* and the problems inherent in restoring a vintage aircraft is contained in "Spar-

rowhawk Re-Marked" by Major John M. Elliott in the Summer 1972 issue of the *AAHS Journal*.)

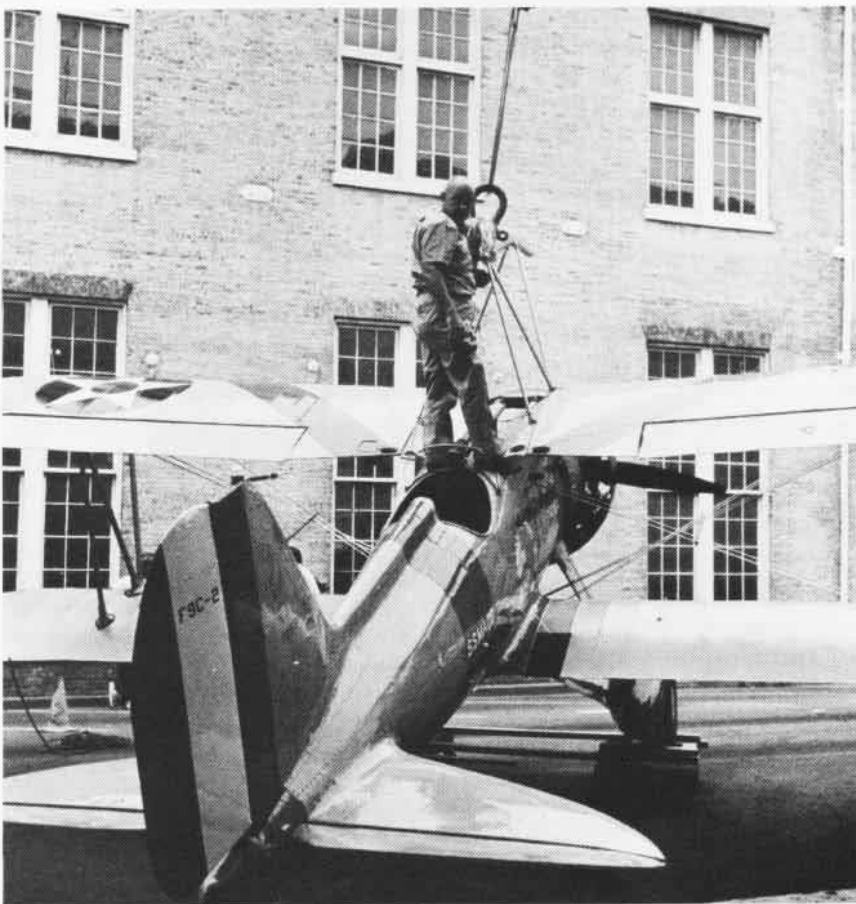
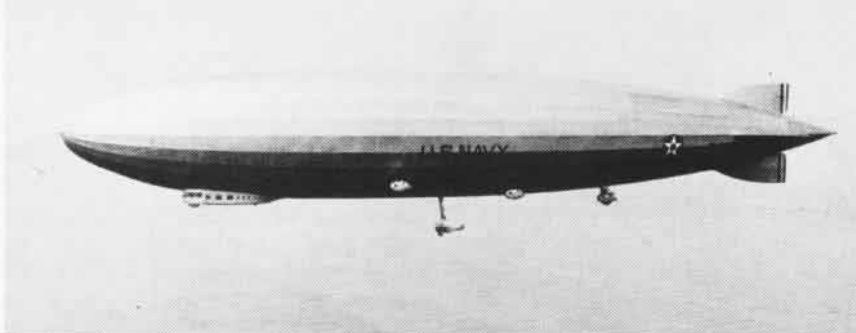
The Squadron completed its three-year labor of love in July and returned the "work of art" to the Smithsonian. Guest of honor on that occasion was retired Admiral H. B. "Min" Miller who talked about his experiences flying the *Sparrowhawk* as a lieutenant in the heavier-than-air unit of *Macon*. He squeezed into the cockpit, commenting that it seemed to have shrunk. Sitting there he remembered things long forgotten — the compass in the left wing and the reach for the trapeze release.

Adm. Miller also recalled that Lt. Ward Harrigan, then in charge of the unit, selected the insignia from a design prepared by an art student in Philadelphia. (Antique Aero Squadron member Johnie Sullivan painted the official insignia on the refurbished F9C-2.)

He also described the auxiliary fuel tank that was used when the aircraft's landing gear was removed during air-



Above, left to right, an F9C-2 hangs from its trapeze on USS Macon; restored Sparrowhawk hangs from the girders at the Navy Museum; a full view of the 'airplane on its flying trapeze.' At right, today's 9056 is set down in front of its temporary home. Later it will be at the Naval Aviation Museum.



ship operations. The lack of landing gear startled many an unsuspecting pilot when he found a plane without wheels flying wing with him.

Routine apparatus on the plane included rather standard equipment for checking oil and gas levels, as well as a gas sump pump. The battery was checked by unlocking the top of the seat and moving it forward. There was a placard posted with the warning that the seat must be locked to the backboard before takeoff. The plane had a hand-cranked inertia starter and manual brakes.

During operations from the dirigible, the pilot started his aircraft just as he was lowered into the airstream. For this purpose there was a 110-volt DC starter and an oil heater — connected by an extension cord from the trapeze to a plug on the instrument panel.

Flotation bags were folded into the underside of each upper wing, outboard of the N struts. These were manually released. Control or gust locks were located on the control stick

which had rods attached and were secured with a strap when not engaged. The rudder pedals had a slotted fitting on the floorboards which engaged the rudder cables.

With the restoration complete, it was decided that the finished product would be loaned to the Navy for display until its permanent home is ready. Moving it became a logistics problem. It was finally transferred to the Navy Yard Museum beginning at 2 A.M. one morning, in a completely assembled condition except for the skyhook which was temporarily removed.

The *Sparrowhawk* was restored with attention to minute details under

the direction of Don Merchant and his assistant, Joe Fichera, of the Silver Hill unit of Smithsonian.

Almost everyone in the Potomac Antique Aero Squadron, including president Harvey Paige, put in time on the project.

Joe Cady and Jerry Pyle ramrodded the fuselage and cockpit cleanup. Burt Brooks was in charge of engine overhaul and Nate Frank, John Lachendro and Bill Surgi did some of the cockpit rebuilding.

Today the finished product, a lasting contribution to the history of Naval Aviation, waits to take its place on the Mall with *The Spirit of St. Louis* and the Wright brothers' *Flyer*.



Moffett Field's VP-48 hosted a 12-man team of Royal Australian Air Force personnel recently. The visitors were evaluating the P-3C with an eye toward the *Orion* replacing the RAAF's SP-2H *Neptunes*. The Australians already operate some P-3Bs. The contingent flew in an *Orion* on an exercise with a submarine to get a realistic look at the Charlie model's capabilities.

More than 1,000 active duty, reserve and retired Marine flyers and aviation personnel attended the Marine Corps Aviation Association's third annual convention last year at the Disneyland Hotel in Anaheim, Calif. The association presented a number of awards. Lieutenant Colonel Michael P. Sullivan was honored as Naval Aviator of the Year. Chosen Naval Flight Officer of the Year was Maj. William R. Bridgham, Jr. Other "of the year" winners were Capt. Vernon L. Clark, Aviation Ground Officer; Maj. James W. Bierman, Air Controller; GSgt. Donald Schwartz, Jr., Fixed Wing Aircrewman; and Sgt. Rickey A. Hess, Plane Captain.

The new Commander, Attack Carrier Air Wing Reserve 30 is Captain Leroy B. Keely who relieved Captain Phillip D. Richardson in ceremonies held at NAS Alameda. Capt.

Richardson moves up to the staff of Commander Second Fleet in Norfolk. Capt. Keely's charges include *Skywarriors*, *Phantoms*, *Corsairs*, photo *Crusaders* and E-1 *Tracers*. Some of the wing's aircraft are shown in echelon over Lake Tahoe.

Captain Maralee Johnson has become the first woman Marine assigned to an aviation group-level command. Her transfer to Marine Combat Crew Readiness Training Group 20 as the adjutant represents one element of a pilot program billeting women Marines in Fleet Marine Force units.

Alameda's HS-85 has a new C.O. for its SH-3A squadron. Commander Theodore G. Sholl relieved Commander Lawrence M. Elson. The ex-skipper of the CVSGR-80 reserve unit holds a PhD in anatomy and lectures at the U.C. School of Medicine in San Francisco. Cdr. Sholl flies for United Air Lines when not piloting *Sea Kings*.

Commander William H. Compton has taken command of the VP-56 *Dragons*, relieving Commander Charles S. Cornett, Jr., at Jacksonville ceremonies. Aboard the *Big E*, Commander George Furlong, Jr., was relieved as Commander, Attack Carrier Air Wing 14 by Commander John R. Wilson, Jr. Furlong is now skipper of fleet oiler, USS *Ponchatoula*. USS *Hancock's* new C.O. is Captain Frederick G. Fellowes, Jr., who took the reins from Captain Philip J. Ryan. During Ryan's tour, CVA-19 marked her 30th anniversary since she was commissioned on April 15, 1944.

The 45 men of the Range Aircraft Division at the Pacific Missile Range have been active and then some. Late last year the division supported Air Force downrange tests of the ICBM program. Three of the unit's four EC-121 *Super Constellations* logged approximately 450 hours and flew about 90,000 miles in a two-month period. The division's aircraft cycled through a variety of Pacific fields including Hickam, Kwajalein and Guam. The planes provide a stable platform for sophisticated telemetry equipment which aids "over the top" tracking of missiles. The Range Aircraft Division also operates S-2s in support of sea test range operations.

Nine junior high school students from Livermore, Calif., are extremely grateful to a certain Navy helicopter crew based at



Lemoore. The youths were on an October weekend hike last year in Yosemite National Park when a surprise snowstorm stranded them. Most were wearing light clothing which added to their woes. Their adult leader hiked from the 9,500-foot level of Cathedral Lake, a distance of about ten miles, to a U.S. Ranger Station where rescue efforts were accelerated. LCdr. Norm Hicks with his copilot Lt. Dick Gerrodette, assisted by HN Hank Smith and PR2 Gary Anderson and Chief Ranger Bill Wendt swung into action. Hicks had to abandon the initial approach at the scene because of weather. On the next try the helo was landed near several two-man pup tents sheltering the students from the near-zero cold. An overland rescue team from the Park Service also arrived, having climbed and skied their way through the rugged terrain. The five girls and four boys were cold but unharmed. LCdr. Hicks credits the SAR team's intimate knowledge of the rescue terrain and regular exercises with National Park Rangers as contributing to the speedy recovery. "Weatherwise," he added, "this was one of the roughest SAR missions I've ever been on."

Assistant SecNav for Manpower and Reserve Affairs, Joseph T. McCullen, is shown strapping into a T-2 *Buckeye* for a fam flight with Corpus Christi's VT-3. Mr. McCullen visited several south Texas naval installations getting a firsthand look at Naval Aviation training.



Last December the Reserve ASW Tactical School at Willow Grove became fully equipped to train P-3 sensor operators. A four-position *Jezebel* trainer, equipped with a Honeywell 7600 tape recorder, has been completed. All Naval Air Reserve P-3 ASW crewmen can be position-trained at the school. By mid-1975 nine reserve units will be equipped with *Orions*. Included among the nine will be VP-69 whose personnel began transitioning last fall and will soon relinquish their *Neptunes*, like the one shown taxiing below.



In a December change of command, Fleet Composite Squadron Three saw Commander Larry K. Simmering turn over control to Commander Charles W. Cole. The North Island unit operates TA-3B *Skywarriors* and DC-130A *Hercules* aircraft.

"We circled the volcano. The weather was getting worse," recalled VXE-6's Lt.jg. Doyle McClung. "Under any other conditions we would probably have waited until the weather cleared." The scene was the slope of Antarctica's Mount Erebus, a 13,500-foot-high active volcano. McClung and his crew, Lt. Miles Croom, copilot, and ADJ2 Daniel Pennington, were responding to a distress call from a group of New Zealand scientists and an American who were setting up a base camp preliminary to research efforts. One of the party was suffering from lack of oxygen and possible exposure due to the dense cold atmosphere. During the approach the men on the ground were shielded from view by low clouds and blowing snow but the helo crew was able to deliver three cylinders of oxygen and transport the ill scientist back to the Navy's base at McMurdo Station.

Letters

Honorary Naval Aviator

I am a former Naval Aviator (1945-1958) and I still enjoy reading *Naval Aviation News*. I was very pleased with the June 1974 issue because it gave a history of the Grampaw Pettibone feature. I think that Robert Osborn and those who wrote the narrative accounts have contributed enormously to the cause of aviation safety in general and Naval Aviation safety in particular.

Mr. Osborn has every reason to be very proud of the work that he has accomplished, and I think that he should be designated an Honorary Naval Aviator because he is one of us.

Bob McCarthy
2204 Alice Ave., #104
Oxon Hill, Md. 20021

It's the Real Thing?

This A-7 looks like the genuine article but it is really a model. It was built by Mr. Jefferey W. Lew of Oakland, Calif., who describes himself as "an aircraft fanatic." Mr. Lew is now busy with a new project — a detailed representation of the F-14 *Tomcat*.



Bermuda Triangle

I recently read an article by Michael McDonell in the June 1973 issue of *Naval Aviation News* on the loss of Flight 19 out of NAS Ft. Lauderdale on December 5, 1945. The article was sent to me in answer to my request for assistance in preparing an article for civil aviation periodicals on the anniversary of the incident this year.

I would like to ask readers who may have been stationed at NAS Ft. Lauderdale around December 1945 for any assistance they can give in piecing

together an accurate picture of life at the station, details of earlier inflight emergencies they may know about, problems with local weather conditions or other navigational problems.

Of particular interest would be personal recollections concerning members of the Flight 19 crew. Any information about the paint schemes and markings of *Avengers* based at Ft. Lauderdale in 1945, especially photos of the aircraft or the base, would be of great assistance. Any materials submitted will be handled with great care and returned as soon as possible.

I would also like to hear from anyone who participated in the search effort or who could provide details of the communications center at Port Everglades.

Any assistance will be greatly appreciated and given full acknowledgment when the article is published. Perhaps the time has come for a realistic, in-depth look at this incident in an effort to remove it from the sphere of myths, UFOs and the occult, and establish it as a classic tragedy of bad weather and bad luck which overtakes pilots in this area every year.

Edward C. Dempsey
709 SW Riverside Drive
Ft. Lauderdale, Fla. 33312

Shenandoah

There is noted on page 30 of your October 1974 issue the photograph of the rigid airship *Shenandoah* (ZR-1) with its accompanying remarks re the transcontinental round trip made by that ship 50 years ago.

Possibly it might be termed a "record" trip, but actually it was the *only* such flight effort made by a ZR. Also, the mooring at the northwest point of the flight was at Camp Lewis near Tacoma, Wash., and not at Seattle.

From my close association with LCdr. Lansdowne, the airship skipper, I know that the idea of so "pioneering air navigation for commercial enterprise" never entered into his thinking. The three expeditionary mooring masts used (Fort Worth, San Diego, Camp Lewis) were remnants of a wisely abandoned plan for Arctic exploration by the *Shenandoah*. Their availability made possible a variety of operational training embracing overland and oversea navigation, extended operation away from a main base,

conservation of lifting gas and other consumables, study and outmaneuvering of the elements, and almost always operating the ship up to her limits. It was a creditable accomplishment for a ZR of the *Shenandoah* type, our first rigid airship, and undertaken in behalf of naval aircraft of the airship type.

C. E. Rosendahl
Magnolia Lane and the River
Toms River, N.J. 08753

Ed's note: *Shenandoah Saga* by Thom Hook contains a full account of ZR-1 and is available through Air Show Publishers, Annapolis, Md.

REMEMBER !

Official Opening

NAVAL AVIATION MUSEUM

NAS Pensacola, Fla.

13 April 1975

Once a Naval Aviator . . .

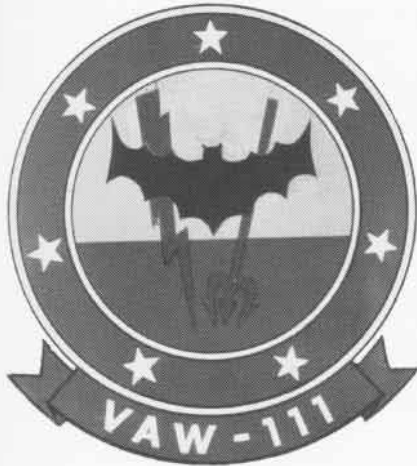
I find the urge to remain in contact with Naval Aviation is too large to fight anymore. I am now in the Navy Medical Corps going to medical school after having spent five years in the aviation field as a jet pilot. I thought it would be easy to keep those wonderful times in the background and that it would be possible to pass by an airfield without stopping. Alas, I find it impossible.

I have also spent many moments with the visual image of a flight of A-4s (my favorite and long-time friend) coming into the break at the carrier.

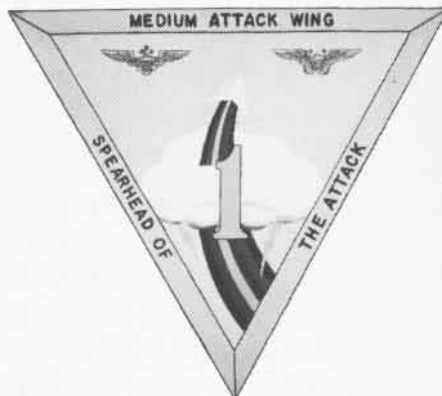
I must, therefore, subscribe to *Naval Aviation News* and at least experience the vicarious thrills of something exquisitely beautiful.

Stephen S. Cook, Lt.
128 Joyce Kilmer Ave.
New Brunswick, N.J. 08802

Editor's Note: We Goofed! On page 47 of the July 1974 issue of *NA News* we incorrectly stated that VA-35 won the Presidential Unit Citation during the Korean War. In fact, VA-35 was awarded the Korean Presidential Unit Citation during that conflict.



These are some of the insignia approved by the Aviation History Office (Op-05D) during 1974. OpNavInst 5030.4C of November 6, 1974, is the current directive on insignia. It does not affect previously approved insignia.





NAVAL AVIATION

NEWS